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THE TRANSPORTATION & BUSINESS LOGISTICS MAGAZINE NOVEMBER 1991

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The air vs. ocean decision: Part II

How to manage your LTL

The right Rx for drug distribution

NOVEMBER 1991

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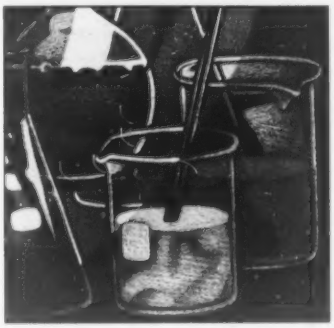
THE TRANSPORTATION & BUSINESS LOGISTICS MAGAZINE

VOL. 90, NO. 12

COVER STORY

28 TRANSPORTATION EXECUTIVE OF THE YEAR

Corning's Jack Lind developed a system for "profiling" carriers in the early 1980s. The quality measurement system Lind pioneered is now a formal part of Corning's carrier management process. It's just one reason the National Industrial Transportation League has chosen to honor Lind this year.



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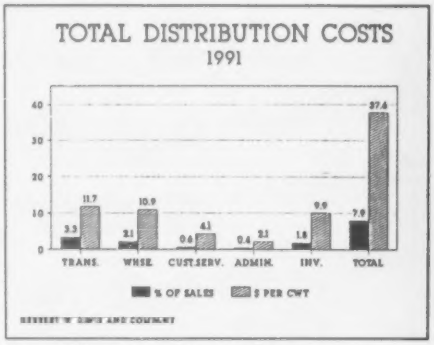
LOGISTICS TRENDS

Distribution costs on the rise, but this should be no surprise

Distribution costs have increased by the largest margin in at least 30 years, according to the 1991 Herbert W. Davis Database. Total distribution costs reported in 1991 (actually for calendar year 1990) had reached 7.93 percent of sales for the approximately 300 companies in the Davis survey. This amount was a 6.9 percent increase over 1989 results. In terms of cost per hundredweight, the average distribution costs in the 1991 survey were $37.64. The most significant cost increases were in transportation, which now amounts to 3.31 percent of sales, and warehousing, which now amounts to 2.03 percent. Herbert W. Davis, president of the Englewood, N.J., firm bearing his name, attributes the increases in these areas to management failures. "Carriers have developed more sophisticated marketing and analytical skills and tools than shippers have," says Davis. "Warehousing productivity is down despite the availability of better technology. Orders are getting smaller, but most companies haven't adapted to these changes." More troubling to Davis than the cost increases themselves is the breadth of the slippage. "More than 50 percent of companies in this year's survey experienced distribution cost increases, versus 25 percent in the 1990 survey," he says. "Only 28 percent of the companies this year were able to reduce costs."



Struggling to reduce costs

Penn State's Coyle honored by CLM for distinguished service

The man who helped Pennsylvania State University's Business Logistics Department get off the ground has been named the 1991 recipient of the Council of Logistics Management's Distinguished Service Award. Dr. John J. Coyle, professor of business logistics, has been in the field for more than 30 years. His logistics career started in the 1960s when he helped raise the funding necessary for the start-up of the Business Logistics Department. In 1989, he was a catalyst for the founding of the Center for Logistics Research there.

The Distinguished Service Award was inaugurated in 1965 as a tribute to John Drury Sheahan, a pioneer logistics consultant. A top priority in the selection process is the individual's contribution to the profession through educating others. Many of today's top logistics leaders' careers have been nurtured by Dr. Coyle's guidance.

The Council also presented the 1991 E. Grosvenor Plowman Award to Dr. Frank W. Davis, Jr., professor of marketing, logistics and transportation at the University of Tennessee, and Karl B. Manrodt, a doctoral student also at the university.

The award is presented to those individuals whose papers were judged to be among the best submitted for competitive review by a panel of educators and logistics executives at the Transportation and Logistics Educators Conference, the day before the annual CLM conference. The paper submitted by Dr. Davis and Mr. Manrodt was titled *Teaching Service Response Logistics.*

Coyle: A catalyst

CLM elects new officers for 1991-1992

Members of the Council of Logistics Management elected their 1991-1992 officers during their annual meeting in New Orleans. The new president is Ira (Blaine) M. Ross, Manager, Transportation Services for Bristol-Myers Squibb in New York. Other elected officers include: Robert Camp, Xerox Corp., as 1st vice president; Gary Sease, Servistar Corp., as 2nd vice president; and Franklyn Hathaway, Van den Bergh Foods, as secretary and treasurer.

The following chairpersons were appointed by Mr. Ross: Nancy Haslip, Digital Equipment Corp., as general conference chairperson; James Keebler, Hill's Pet Products, as planning chairperson; David Tarr, Pet Inc., as roundtable chairperson; Carl Evans, Keebler Co., as professional development chairperson; Bernard LaLonde, Ohio State University, as research chairperson; Joseph Andraski, Nabisco Brands, Margaret Emmelhainz, University of Dayton, and Kenneth Novak, W.W. Grainger, Inc., as current project chairpersons; and George Gecowets as CLM executive vice president.

CLM President Ira (Blaine) Ross

Trucking

A KINDER, GENTLER LTL RATE INCREASE FOR 1992?

Major LTL carriers are trying to make their rate increases easier for customers to swallow. Most carriers have announced their rate increases well in advance—and they're pledging that this increase will be the only one for the year.

1992 LTL RATE INCREASES

	1/1/92 Increase	6/91 OR	6/90 OR
Roadway	4.84	96.1	96.6
Yellow	5.0 (est.)	98.5	95.4
C.F.	*	97.5	95.5
Carolina	4.84	98.3	99.1
ABF	4.8 (est.)	96.3	94.7
Overnite	*	92.7	91.0

* Figures not available

"Unacceptable margins"

Roadway Express nas made itself the pricing leader by being first to announce the increase. "Having the effective date on January 1 helps shippers in their budgeting process," says Roadway President, Michael Wickham.

David Stubblefield, vice president of marketing for ABF, agrees with Roadway's approach. "The times are gone when we can take increases a couple of times a year; it's expensive to do that," he says. Carriers must send out thousands of diskettes with the new rates, reload their own computers and jump through other administrative hoops.

Few shippers would argue that carriers need a rate increase. Operating ratios through the first half of 1991 have crept up two to three points for most carriers. "Return on equity is a not where we want it," says Dan Sullivan, executive vice president of Roadway Services. "The recession is the main problem, but competitive pricing pressures have narrowed margins to unacceptable levels."

"The concern is that if this is the only one (increase) you're going to have, you'd better stop discounting it away," adds Stubblefield.

Another carrier concern is that more and more LTL traffic moves under contract. "The problem (with contracts) is that you won't see the benefit of the increase right away," says Stubblefield. He says 30 to 40 percent of ABF's business is under contract. Many of these renew on April 1.

Tony Robertson, a trucking industry analyst with Alex. Brown & Sons, thinks the increase will stick. "Traffic has been picking up for most major carriers, and discounting has been moderating," he says. He's less confident that shippers will see only one increase in 1992. "If this recession really is over and the economy is coming back, I would be surprised if there were only one rate increase in 1992, regardless of what the carriers are saying now," he says. "The philosophy in the LTL industry is becoming, 'Take the increase when you can, not when you want to.' "

ROADWAY HAS A HEADSTART ON ALTERNATIVE FUELS

The clock is ticking on implementation of the Clean Air Act, which could bring many shipper and carrier trucking operations in 48 major cities to a screeching halt as early as 1994. But one major LTL carrier is not waiting to see what happens when time runs out. Roadway Express has begun field evaluations of pickup & delivery (PU&D) vehicles powered by liquified natural gas (LNG) as a possible replacement for diesel and gasoline.

The best solution

According to Don Dawson, Roadway's vice president of maintenance, engine emission requirements under the Act will become increasingly strict between 1994 and 1998, to the point that "non-complying cities may be off limits" to gasoline or diesel vehicles. "That is why PU&D vehicles would be the first to be converted from traditional fuels," says Dawson. "The fact that OSHA says diesel fuel is a carcinogen puts more pressure on us to look for alternative fuels."

Roadway evaluated various fuels including methanol, ethanol, liquid petroleum gas (LPG) and two forms of natural gas, compressed gas and LNG. Roadway's requirements for an alternative fuel? High energy relative to density, simplicity of use, low investment, minimal environmental impact and assured long-term supply. Dawson says all other alternative fuels had disqualifying characteristics. Methanol and ethanol are low energy, explosive and hard to handle. Methanol is quite toxic. LPG and compressed gas require too much space and weight on the vehicle. LNG is the best overall solution, he says.

According to Kenneth T. Cuccinelli, vice president of marketing and technology for Consolidated Natural Gas, a joint venture partner in Roadway's tests, LNG is safer and more economical than diesel, and it burns cleaner than either gasoline or diesel, so it reduces the maintenance cost on engines.

LOGISTICS' EVOLUTION CONTINUES

Ohio State University's 1991 Career Patterns Survey reveals several subtle shifts that indicate how logistics is evolving as a discipline. The first of a two-part series.

By the Logistics Research Group, Ohio State University

For the last twenty years, the Logistics Research Group at The Ohio State University has performed an annual survey of the career patterns of senior logistics executives in major American corporations. The purpose of this work is to establish baseline information regarding the status of logistics as a profession, as well as to gain an understanding of how firms have integrated the logistics function into their organizational structures and to determine the specific responsibilities of a logistics executive in a typical firm.

The 1991 Survey of Career Patterns in Logistics specifically addresses the following questions:

- How have successful firms structured, organized and managed their logistics functions?
- What is the demographic profile of the logistics executive?
- What factors will shape the future direction of the logistics function within American corporations?
- What forces will contribute to the decentralization or centralization of logistics?

This last question was new to the 1991 Career Patterns survey, and the results will be discussed in depth in a separate feature to appear in the January 1992 issue of DISTRIBUTION.

DIMENSIONS OF THE LOGISTICS FUNCTION

Dimension	Logistics Activity	Direct Responsibility	Time Spent
Warehousing	97%	83%	19%
Traffic Management	96%	81%	19%
Inventory Control	79%	60%	10%
General Management	79%	65%	21%
International Distribution	76%	61%	7%
Plant/Warehouse	74%	43%	7%
Order Processing	58%	31%	6%
Packaging	51%	19%	3%
Order Entry	49%	24%	3%
Procurement	49%	31%	7%
Product Planning	40%	18%	4%
Sales Forecasting	32%	14%	2%

Methodology

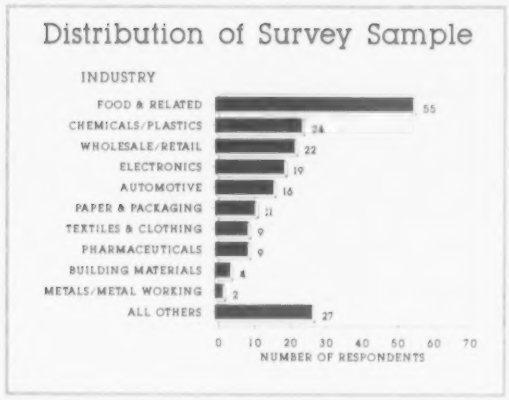
This year's results are based on our analysis of responses to a five-page questionnaire distributed to 768 members of the Council of Logistics Management during July and August 1991. Each company received only one questionnaire routed to the senior logistics executive in the firm; a total of 200 valid responses were received, yielding a return rate of 26 percent. Because the exact identity of our sample population is unknown, extensions of our findings beyond the sample to the entire population of logistics executives can only be made with an undeterminable statistical risk. For these same reasons, comparisons of this year's results with prior surveys would encounter similar problems. Nevertheless, we believe that the size of the survey response and the obvious care which respondents demonstrat-

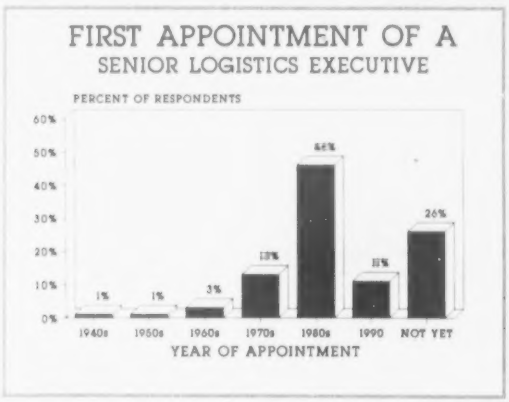
continued

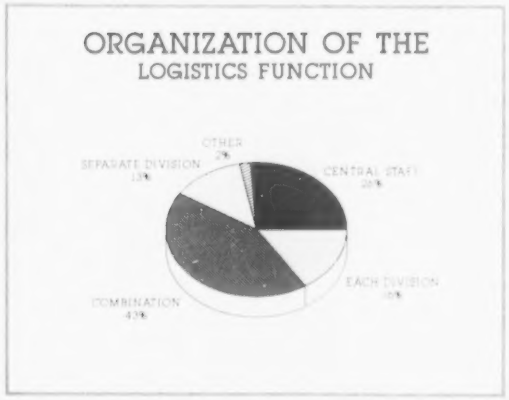
ed in completing the survey indicate that the sample results have validity in themselves, and that we can reasonably consider them roughly representative of the entire population of logistics executives.

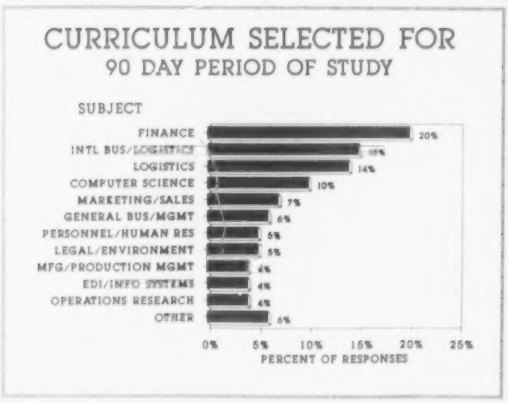
We asked the respondents to classify the nature of their business. The results show great diversity across industry categories *(p. 40)*. The food related products group represented the largest percentage, 25 percent, of the response. No other group accounted for more than 12 percent. The survey response also appears highly heterogeneous regarding the size of the firm. We asked respondents to estimate the firm's annual sales volume or gross revenue. Answers varied widely: the surveyed firms had a median sales volume of $850 million. Five percent of the sample firms reported revenues at or below $80 million, while at the other extreme five percent of the firms had revenues of $14 billion or more. The reader should carefully consider the comprehensive range of the survey; the statistics reported include averages representing both large and small firms.

The survey results have been grouped into four major categories. First, we will discuss the organizational profile of logistics in the firm — how the firm has structured itself to perform the logistics functions. Next, we will address the operational profile of the firm to show the scope and dimensions of logistics responsibilities in the firm. Third, we will develop the demographic profile of the contemporary logistics executive in terms of age, experience, education









and compensation. Fourth, we will report what executives see as future trends in logistics management.

An Organizational Profile

Sixteen percent reported that a logistics department existed in each division of the firm, while 26 percent said the logistics function consisted of a central staff *(p. 40)*. An additional 43 percent report a split of the logistics function, with some functions performed by a divisional department and some responsibilities residing in a central staff.

We asked the respondents whether they considered their job primarily line or staff in nature. Line functions have direct responsibility and control over logistics decision making, while staff functions primarily perform an advisory role. Thirty-six percent indicated that their job involved direct responsibility, while only three percent viewed their role as purely advisory. The remaining 60 percent reported that their position included direct responsibility over some logistics functions and advisory responsibility over others.

In an attempt to gauge the maturity of the logistics organization, we asked the year the firm first appointed a senior executive-level manager with a formal title and responsibility in distribution or logistics. A "senior" position was defined as one at the vice-president level. Since 1980, firms have established such a position at a rate exceeding four percent per year *(p. 40)*. However, 26 percent of the firms have not yet established a senior logistics executive.

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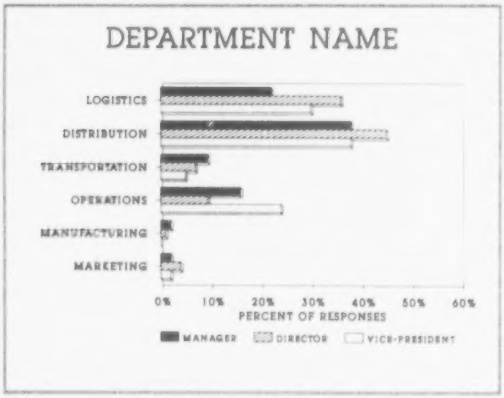

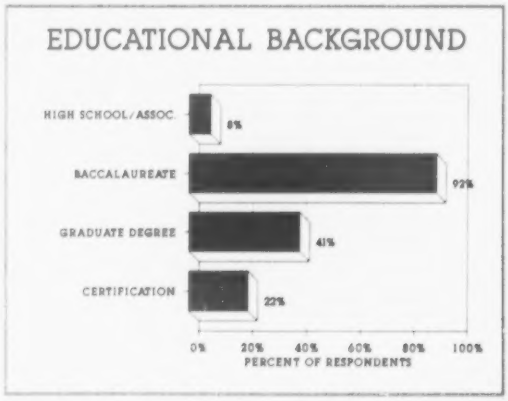

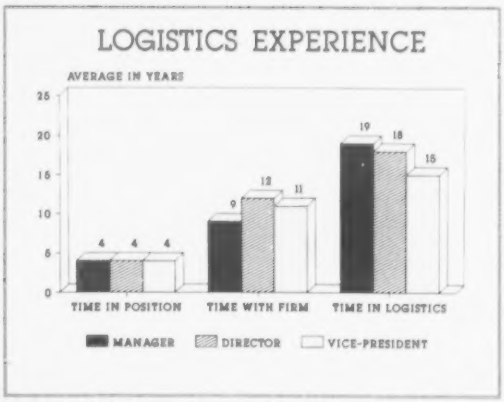

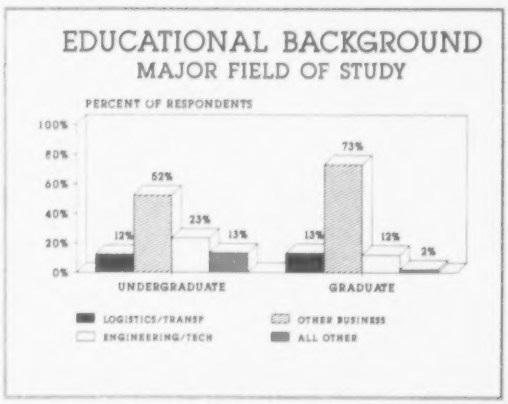

The survey respondents held positions at three management levels. Twenty-eight percent of our respondents had job titles as managers, 45 percent were directors, and the remaining 27 percent held vice-president positions within their firm. Most of the executives work in a department called "Logistics" or "Distribution." Only a small proportion work in a department titled "Transportation," "Operations," "Manufacturing" or "Marketing."

A Demographic Profile

In an attempt to measure the scope of the logistics function, each respondent was presented with a list of traditional logistics activities and was asked to specify if the activity was considered to be a logistics function by the firm, if the respondent had direct responsibility over the activity, and how much time the respondent spent in the activity. The results indicate an almost universal view of traffic management and warehousing as part of the logistics domain *(p. 38)*. On the other hand, only 40 percent of these executives worked on product planning, and only 32 percent had involvement in sales forecasting.

LOGISTICS EXECUTIVE COMPENSATION (annual salary plus bonus)

JOB TITLE	HIGHEST THIRD	MIDDLE THIRD	LOWEST THIRD
Manager	$ 99,000	$ 66,000	$ 53,000
Director	115,000	90,000	68,000
Vice President	195,000	136,000	105,000

HISTORICAL COMPENSATION COMPARISON

Year	Manager	Director	Vice-President
1991	$66,000	$90,000	$135,000
1990	60,000	85,000	125,000
1989	65,000	80,000	105,000
1988	57,000	75,000	122,000

Our average logistics executive has held his or her current position for four years, has been with the same firm for ten years, and has worked in logistics for about 17 years *(p. 41)*. Respondents at all levels of responsibility, manager through vice-president, follow the same general pattern. An executive position in logistics is seldom a short-term, lateral career move for an individual whose expertise is in another area. Rather, the typical logistics executive has an extensive background in logistics and has worked his or her way up to a position of authority. The typical respondent is 42 years old. The distribution of ages ranges from the late 20s to the mid-60s. Ninety-six percent of the respondents are male – and four percent are female!

The educational background of the respondents provides further evidence of the professional nature of the discipline. Ninety-two percent hold a baccalaureate, and 41 percent hold graduate degrees *(p. 41)*. In addition, 22 percent of the respondents hold some form of professional certification. Seventy-five percent of the respondents hold baccalaureate degrees in business (including logistics), and 86 percent of the advanced degrees were in business (virtually all MBAs). We found that the percentage of logistics and transportation degrees has continued to grow, and that the academic programs initiated over the last two decades have increasingly contributed to a professional logistics workforce. We also asked each respondent to choose the subjects he or she would study if permitted to return to campus for 90 days *(p. 40)*. Many topics emerge, but the most often mentioned area was Finance, followed by International Business/Logistics, Logistics and Computer Science.

Executives reported their total annual cash compensation, including salary and bonus *(p. 42)*. The statistics reported are median values for the highest third, middle third, and lowest third of each job category. Statistical analyses were performed to determine which factors might

continued

help "predict" a respondent's salary level. Age, years in the position, and years in the firm show no statistically significant relationship to compensation. Level of responsibility, as measured by job title, is the single most important predictor of compensation. The firm's sales volume also correlates positively with compensation and helps in predicting an executive's salary level. Comparing this year's compensation data with that of prior years suggests a slight upward trend. Interpretation becomes difficult due to differences between samples from year to year.

Logistics' View of the Future

Executives estimated how elements of their 1992 logistics budget would compare with actual expenses incurred in 1991. The results show a projected four percent growth in total logistics costs over 1991. Growth in individual cost categories ranged from four percent for motor carrier rates (TL and LTL) and private warehousing, to 0.3 percent for inventory carrying costs. *(p. 44)*

Survey participants also answered a series of questions to capture their forecasts about the future of logistics. First, respondents identified two major factors which would influence the growth of the corporate logistics function in the next decade. Responses varied widely, but 26 percent of the responses identified logistics costs as a primary factor, and another 24 percent identified customer service *(p. 44)*. Most of the categories are self-explanatory, but a few require comment. "Integration" includes respondents who feel that their logistics functions require closer integration with other functions such as marketing and production, or that logistics must incorporate "new" activities such as purchasing into its area of responsibility. "Competitive Advantage" suggests using logistics to gain a competitive edge in the marketplace through lower total cost, improved productivity, reduced cycle time, incorporation of new technology and superior customer service. ■

Editor's Note: What is driving logistics organizations to centralize or decentralize? For companies that restructure, what impact has it had on performance? These are some of the questions the Career Patterns survey asked this year. DISTRIBUTION will report the results of this part of the survey in Part Two of this feature, which will appear in the January 1992 issue.

The Logistics Research Group at The Ohio State University consists of Dr. James M. Masters, Assistant Professor of Logistics Management; Dr. Bernard J. "Bud" LaLonde, Mason Professor of Transportation and Logistics; and Capt. Terrance L. Pohlen, USAF, Research Associate.